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Message from the CEO's Desk

Dr. Praveen Saxena

Chief Executive Officer Skill Council for Green Jobs



Skill Council for Green Jobs is continuing to focus on quality training to meet industry expectations and to promote skill development for Green business, energy and environment conservation. We are moving towards our goal of capacity addition in all sectors so as to facilitate smooth and just energy transition. As a part of its mandate, SCGJ has carried out Skill gap studies on solid waste management in 4 metro cities of Kolkata, Mumbai, Chennai and Delhi to study the skilling levels of employees involved at various stages of waste management. Another Study on 'India's Expanding Clean Energy Workforce: Opportunities in the Solar and Wind Energy Sectors' was released in Jan 2022 which provided updated data on jobs created through India's on-grid solar and wind energy sectors with an updated findings and recommendations geared toward achieving India's goal of 500 GW of non-fossil fuel electricity generation capacity by 2030. SCGJ also participated in data collection survey under study focused on the Indian market, policy & regulatory regime, technological options, business models and feedstock availability & supply chain for Biogas sector in India. SCGJ is implementing a project with Sattva Consulting sanctioned by JP Morgan for an in-depth study to map the green jobs landscape in India. SCGJ continued with its effects to consolidate and strengthen its technical capabilities and review of qualifications and training materials. We have recently tied up with UNDP for development of 4 nos. of qualification packs and Skilling 1000 persons on Green Electric Vehicle Charging Infrastructure and Solar Cold Storage.

Skill council for Green Jobs in collaboration with International Solar Alliance delivered the series of Online Training program on various topics for ISA Member Countries covering 600 candidates in 30 different countries on the Topis related to Scaling up of Solar Rooftop Project, Solar PV Mini Grid implementation Program, Online Training Program for Bankers of ISA member Countries, Scaling Solar Applications for Agriculture Use (Solar PV Water Pumping Training). SCGJ is developing an Entrepreneurship program around all its major qualifications including solar energy, solar power projects, solar water pumping, waste management etc. The training event was organized through the support of Climate Policy Initiative. SCGJ continues to promote and implement CSR projects with different organizations. SBI Card is supporting a project on Design, supply, erection, and commissioning of 120 kWp Grid tied Solar PV plants at government hospitals in Delhi under which we have nstalled 120 KWp grid tied solar power planton Pt. Madan Mohan Malviya Hospital, Malviya Nagar, Delhi. Further, SBI Cards have recently sanctioned one more project of 450 kWp Grid tied Solar PV plant in Civil Hospital, Gurugram (150 kWp) and Government College for Girls, Sector 14(300 kWp) in Gurugram, Haryana. Most recently, the World Bank has awarded a project titled "Researching solutions for Preparing Schools for Vocational Education in Solar Energy". The project aims to undertake research, identify possible solutions and recommend possible innovations to strengthen the design and delivery of vocational skills in Renewable energy (with a focus on Solar Energy), for children aged 15 -18 years (Class 9-12) across Government Schools in Gujarat. Our efforts for promotion of learning continues through the series of webinars on the occasion of "Azadi Ka Amrit Mahotsav" covering various topics in Renewable Energy, Sustainable Development, waste management, waste to fuel etc. The webinar series was launched on 24th September, 2021 by the Chairman SCGJ and so far 48 webinars have been organized. I am happy to share that we have already succussed in the Water Technology World Skill Special Edition competition with the Silver medal in Germany. I am also proud to inform that SCGJ is participating in the WorldSkills Special Edition for Renewable Energy event at Kyoto, Japan. Al my good wishes with team India.



15th Governing Council Meeting

19th September, 2022

Skill Council for Green Jobs



The Fifteenth Meeting of the Governing Council of Skill Council for Green Jobs was held at 11.00 am on 19th September, 2022, under the Chairmanship of Mr. Sameer Gupta, Chairman and Managing Director, Jakson Group, through video conferencing. He welcomed members and special invitees to the meeting and mentioned that now India's economy is getting back on track and poised to rebound sharply. He mentioned that, we are going to be \$5 trillion economy, certainly by 2027 and that nothing is going to change despite the global challenges that we are in. Our country is appearing to be on track and as we read, the entire world talking about recession, India is still on the path of growth. There are geopolitical tensions, that we are reading about on a daily basis due to the war between Ukraine and Russia. The energy scenario seems to be bad in entire Europe and energy prices have shot through the roof and on top of it, there is also a residual impact is leading to higher inflation. Higher interest costs, supply chain issues, nationalism, deglobalization and of course, there are liquidity challenges as well. Having said this, growth for India will come from new services, new products, and of course, new markets. The Chairman mentioned that there are five strong pillars of growth. As far as India is concerned, one, there is huge focus on infrastructure, be it electricity, water road, ports airports, hospitals, warehouses, data centres. Hon'ble Prime Minister has announced national logistic policy. There is huge focus on infra, as far as India is concerned which is going to drive growth. There is clear shift towards renewable energy as we all know, and energy security for the country. Decarbonization and net zero targets, supply chains are moving away from China. That is a reality, there is a focus on Make in India, and many innovative schemes like PLI etc. have been launched to leverage this opportunity. I think it is a golden opportunity for our country. IT and huge data centres are coming in India, which is again going towards growth and more than 10,000 start-ups are expected to come in India over next three to five years.

He specified clearly that there is no alternative but to shift towards renewables and we need to take greening agenda seriously to keep in pace. Energy landscape is going to change not only in India, but globally and this offers a huge opportunity for us. Scaling will be the key to unleash this opportunity in absence of right skill sustainable growth will be a challenge. We need to have workforce with skill to handle renewable designing, renewable manufacturing, renewable installation, O&M etc. India has a demographic advantage as we all know and 20% of the global population approximately is sitting in our country. We have the potential of becoming skill capital of the world. We as Skill Council for Green Jobs have taken many initiatives in the skilling sector, which shall be shared by our CEO, Dr. Saxena shortly. I would like to compliment the good work done by him and his entire team.

Chairman introduced Mr. Arpit Sharma, the new COO of SCGJ, to governing council member. Mr Arpit Sharma, Chief Operating Officer of Skill Council for Green Jobs thanked the Chairman and members of Governing Council for giving him this opportunity. He mentioned that It is a great responsibility which has been entrusted on him. He will try his level best and will ensure that he takes the council to the newer heights with his work hard and with all his sincerity.



Dr. Saxena CEO, SCGJ gave an over view of the activities during the year and highlighted that **SCGJ has been formally recognized as an "Awarding Body" by the National Council for Vocational Education and Training (NCVET) on 31st May, 2022.** He informed that SCGJ is continuing with Skill gap studies in different sectors and has undertaken one on Solid waste management in 4 metro cities. Another study on 'India's Expanding Clean Energy Workforce: Opportunities in the Solar and Wind Energy Sectors" was released in Jan 2022 in which updated data on jobs created through India's on-grid solar and wind energy sectors with an updated findings and recommendations geared toward achieving India's goal of 500 GW of non-fossil fuel electricity generation capacity by 2030. SCGJ participated in data collection survey under study focused on the Indian market, policy & regulatory regime, technological options, business models and feedstock availability & supply chain for Biogas sector in India. JP Morgan has sanctioned an in-depth study to map the green jobs landscape in India, This 6-month study is collecting inputs from existing literature, existing public/private datasets and conversations with experts, stakeholders across the skilling value chain. SCGJ is implementing the project in consortium with Sattva Consulting.

SCGJ has received CSR Project funded by SBI Card on Design, supply, erection, and commissioning of 120 kWp Grid tied Solar PV plants at government hospitals in Delhi. SCGJ installed 120 KWp grid tied solar power plant installed on Pt. Madan Mohan Malviya Hospital, Malviya Nagar, Delhi. Further, SBI Cards have recently sanctioned one more project for Design, supply, erection and commissioning of 450 kWp Grid tied Solar PV plant in Civil Hospital, Gurugram (150 kWp) and Government College for Girls, Sector 14(300 kWp) in Gurugram, Haryana.

Most recently, the World Bank has awarded a project titled "Researching solutions for Preparing Schools for Vocational Education in Solar Energy" to the Skill Council for Green Jobs (SCGJ). The project aims to undertake research, identify possible solutions and recommend possible innovations to strengthen the design and delivery of vocational skills in Renewable energy (with a focus on Solar Energy), for children aged 15 -18 years (Class 9-12) across Government Schools in Gujarat.

UNDP has recently awarded Skill Council for Green Jobs (SCGJ) a project titled 'Development of 4 nos. of qualification packs and Skilling 1000 persons on Green Electric Vehicle Charging Infrastructure and Solar Cold Storage'. The project aims to train and certify 1000 trainees across 5 qualifications including on PV Installer (Suryamitra) along with Basic and Advanced job role(s) in Solar cold storage and Solar based EV charging infrastructure.

Entrepreneurship program: SCGJ is developing an Entrepreneurship program around all its major qualifications including solar energy, solar power projects, solar water pumping, waste management etc. To start this effort, a two days physical training on Solar Rooftop Entrepreneurship was organized by SCGJ on March 7-8 2022 at its in house training facility in New Delhi. A similar 2 days physical training in coordination with Institute of Solar Power Technologies and Vocational Training (ISPTVT) was organised on 26-27 March 2022 at Central Power Training Institute, Hyderabad. The training event was organized through the support of Climate Policy Initiative.

Training for ISA Member Countries: Skill council for Green Jobs in collaboration with International Solar Alliance delivered the series of Online Training program on various topics for ISA Member Countries. During the period, over 600 candidates has been Trained for participants from more than 30 different countries participated in this training program. The Training was delivered on the following Topis :

- Scaling up of Solar Rooftop Project
- Solar PV Mini Grid implementation Program
- Online Training Program for Bankers of ISA member Countries
- Scaling Solar Applications for Agriculture Use (Solar PV Water Pumping Training)

Considering that Renewable Energy has been introduced for the first time in World Skills, SCGJ has taken a unique initiative named "Foundation Programme on Renewable Energy for India Skills 2022" to train and prepare interested registered candidates for India Skills 2021 and World Skills 2022 under guidance of World Skills experts and RE master trainers. After organizing regional competitions in Punjab and Andhra Pradesh, National Skill Competition was organized in Delhi on Renewable Energy and Water technology. 5 medal holder candidates from National Competition in both sectors are now participated in the World Skills 2022.



Skill Council for Green Jobs organized a felicitation ceremony to award students who would be representing India at the World Skills in renewable energy skill. Smt. Renuprava Nayak, Additional Secretary, Odisha Skill Development Authority and Shri Sanjib Kumar Rout, President, C. V. Raman Global University Odisha graced the occasion as chief guest.

SCGJ Job Portal (https://www.scgjrozgar.in/): SCGJ got the job portal developed and has been made fully functional. SCGJ Job Portal is a technology initiative by Skill Council for Green Jobs to seamlessly connect employers with skilled candidates in the Green Energy Sector.

Dr. Saxena said, SCGJ is also combining efforts with Madhya Pradesh State Open School Education Board (MOSOSEB) for the aforesaid journey to celebrate the "Azadi ka Amrit Mahotsav" The purpose is to first "Involve the Guru" in the state's EFA schools in the 53 districts, so that they first become aware of what is in store for them and the students to expand their knowledge and be skill worthy as "Hunar hai to kadar hai". So far, 52 districts have been covered out of the 53 districts, impacting 1380 teachers and principals.

Over 600 industry, mainly MSME were contacted and informed about the activities of SCGJ. Industries added this year to our Membership are 26 in number. SCGJ has so far signed MoUs / LoAs with 56 industry / organizations with a view to cooperate in its activities and also help in achieving placement of SCGJ certified candidates.

12 new qualifications including in wind energy (6), small hydro power (1), compressed biogas (4) and solar entrepreneurship (1) have been approved in NSQC. With this, SCGJ has 44 NSQC approved qualifications. SCGJ has completed the RPL Trainings of more than 3500 sanitation workers supported by NSKFDC across the country It has conducted Training of Trainer and TOA program for both Solar and Waste Management Domain. SCGJ has conducted assessment and certification in 7 State Missions.

Dr. Saxena also presented the proposal regarding proposed conversion of SCGJ to Section 8 company which was approved by Governing Council.



7th Annual General Meeting

Skill Council for Green Jobs



Mr. Sameer Gupta, Chairman, SCGJ, welcomed members present in the 7th Annual General Meeting of SCGJ. He mentioned that India is clearly on the part of growth and we are well poised to be amongst top three or four economies of the world carbon neutrality agenda has gained momentum and is being driven by three things Climate change mitigation; Energy security; and third is net zero targets. In 2018, only 25% of the countries had decarbonized agenda and today it is 90% plus. I think this is a major shift, there is a clear realization that renewables will have a key role to play in driving this carbon neutrality agenda, both in India and across the world.

He said that Hon'ble Prime Minister had made three bold commitments in COP 26 conference last year in Glasgow, one was cut on emission by 1 billion tons by 2030, other was targeting 500 gigawatts of renewable capacity by 2030, which will be close to 50% of the total installed capacity of power and third is to make India net zero by 2070, this brings a huge responsibility on each one of us on all the citizens of this country. Aatma Nirbhar Bharat and making India initiatives, which were launched couple of years back have two clear objectives. One is to make the country self-reliant; another is to position India to be an alternative supply chain destination for the world. This is an apt opportunity for our country to make our global presence felt in renewable energy sector. Perhaps to my mind, it is now or never.

He summarized that there are five global mega trends, which are changing the nature of work and the skills demand (i) Climate change, (ii) Technical, technological changes and disruptions (iii) Demographic shifts, (iv) Urbanization and (v) Globalization of value chains. For being successful in 21st century, one needs a comprehensive skill set, which includes cognitive skills, socio-economic skills, technical skills, and digital skills. There is a new education policy, which envisages introduction of vocational education in schools and colleges.

SCGJ made a detailed presentation on the activities of SCGJ during 2021-22 and 1st quarter of 2022-23 (up to 31.08.2022). A 10 minutes video film was presented to the meeting showing 7 years journey of SCGJ. Further it was mentioned that the year 2021- 22 was a consolidation year, strengthening SCGJ technical capabilities and review of qualifications and training materials. However, with the restrictions on classroom trainings, SCGJ adopted E Learning through launching SCGJ E Learning Management System and delivered various online courses and virtual trainings which included multiple trainings on various themes in solar in three languages for 1300 trainees from 82 Inter National Solar Alliance (ISA) member countries.

SCGJ has also developed two Greening NOSs which are being adopted by all SSCs for the QPs development. Further, SCGJ has developed courseware for effectively incorporating greening attributes across all job roles, which would further contribute towards "Net Zero" emissions targets.



It is reported that since its inception, in Oct 2015, SCGJ has developed (and subsequently revised) 44 NSQC approved Qualification Packs (QPs) also referred as "Qualifications" or "Job Roles" across key thematic areas including solar PV segment, wind energy, small hydro, waste and waste- water management, clean cookstove, other green jobs areas etc. on which cumulatively over 5,04,000 (over Five lakh) candidates have been certified so far. Majority of the candidates have been trained in waste & water-management job roles (over 4 lakhs) along with various solar job roles (over 1 lakh). For the latter, majority of the trainings have been done on Solar Installer (Suryamitra) job role (Over 80,000) which is a flagship solar training program of the Ministry of New and Renewable Energy (MNRE), and is also implemented under "Pradhan Mantri Kaushal Vikas Yojana (PMKVY)" the flagship skilling scheme of the Ministry of Skill Development & Entrepreneurship (MSDE). In addition to technical aspects of solar PV system installation and O&M, Suryamitras are also trained on entrepreneurial aspects to improve their skills and overall employability.

Skill Council for Green Jobs has carried out Skill Gap study for all its subsectors. For Renewable Energy, skill gap study was first carried out during 2016-17. It was revisited in April 2019 in coloration with CEEW and NRDC. The Waste Management, Green Construction, carbon sinks, clean cooking skill gap studies were undertaken in the year 2017. Following this almost every year, skill gap studies are undertaken on new and upcoming technologies and technical areas. During the year 2021-22 following studies have been taken up: Review of RE skill gap in view of the revised targets set by MNRE in the renewable energy, Solid Waste Management study in 4 metro cities, Study on Landscape of Green Jobs in India with the objective to advance green jobs in the Country- Funded by M/s J P Morgan under CSR Initiative.

During the 2021-22, SCGJ has received CSR Project funded by SBI Card on Design, supply, erection, and commissioning of 120 kWp Grid tied Solar PV plants at government hospitals in Delhi. As a part of the project, SCGJ installed 120 KWp grid tied solar power plant installed on Pt. Madan Mohan Malviya Hospital, Malviya Nagar, Delhi . Further, SBI Cards have recently sanctioned one more project for Design, supply, erection and commissioning of 450 kWp Grid tied Solar PV plant in Civil Hospital, Gurugram (150 kWp) and Government College for Girls, Sector 14(300 kWp) in Gurugram, Haryana. SCGJ will also provide skilling and maintenance assistance during the project period.

SCGJ has implemented IRISE project supported by GIZ to improve PV rooftop installation quality through Up-skilling Indian solar installers (certified Suryamitras) through conducting 10 days training batch. One of the key objectives of the project is to upskill 1500 "certified suryamitras" through 30 training partners. Most recently, the World Bank has awarded a project titled "Researching solutions for Preparing Schools for Vocational Education in Solar Energy" to the Skill Council for Green Jobs (SCGJ). The project aims to undertake research, identify possible solutions and recommend possible innovations to strengthen the design and delivery of vocational skills in Renewable energy (with a focus on Solar Energy), for children aged 15 -18 years (Class 9-12) across Government Schools in Gujarat.

UNDP has recently awarded Skill Council for Green Jobs (SCGJ) a project titled 'Development of 4 nos. of qualification packs and Skilling 1000 persons on Green Electric Vehicle Charging Infrastructure and Solar Cold Storage'. The project aims to train and certify 1000 trainees across 5 qualifications including on PV Installer (Suryamitra) along with Basic and Advanced job role(s) in Solar cold storage and Solar based EV charging infrastructure. The project is also supporting development of 4 qualifications including an advanced and basic qualification for both Solar cold storage and Solar EV charging infrastructure on which cumulatively 700 trainees will be trained and certified across select locations.

Under the National Knowledge Network(NKN), an advisory body has been set-up by the Ministry of Environment, Forest & Climate Change/ Central Pollution Control Board to support the implementation of the National Clean Air Programme (NCAP) with the support of the World Bank. The goal of this project is to develop a roadmap for the capacity building in the Air Quality Management sector aligned with the National Skills Qualification Framework of India. Under this project International Forum for Environment, Sustainability & Technology (iFOREST) in collaboration with SCGJ. SCGJ is actively participating in this effort with a view to understand the skill workforce required in the effort of Air Quality Action Forum (AQAF) and develop national qualification in this sector. In this regard a report has been prepared on 'Jobs for Clean Air in India'. This report would form basis to develop various qualifications in this sector.



SCGJ got the job portal developed and is now fully functional. SCGJ Job Portal is a technology initiative by Skill Council for Green Jobs to seamlessly connect employers with skilled candidates in the Green Energy Sector. On this platform employers create and publish the job post, monitor/track job applications while the candidates can register, apply for the job and track their application. Skill Council for Green Job's Rozgar Portal is a unique technology intervention which makes job opportunities for skilled professional in green energy sector accessible by connecting them with coveted employers across India. It automates the entire talent acquisition process for employers, provides job opportunities to skilled workforce and help SCGJ make necessary interventions in Skill development activities to meet industry needs.

It was informed in the meeting that SCGJ is developing an Entrepreneurship program around all its major qualifications including solar energy, solar power projects, solar water pumping, waste management etc. To start this effort, a two days physical training on Solar Rooftop Entrepreneurship was organized by SCGJ on March 7-8 2022 at its in house training facility in New Delhi. A similar 2 days physical training in coordination with Institute of Solar Power Technologies and Vocational Training (ISPTVT) was organized on 26-27 March 2022 at Central Power Training Institute, Hyderabad. The training event was organized through the support of Climate Policy Initiative.

Dr. Saxena also presented the proposal regarding proposed conversion of SCGJ to Section 8 company which was approved by Annual General Body.



Green Entrepreneurship

Dr. (Mrs.) Parveen Dhamija

Advisor Skill Council for Green Jobs

Today all over the world, we are facing continuous environmental problems of depleting natural reserves, increase in global temperature and Green House gas emissions. Climate change has not only damaged our environment and affected the ecological cycles but also endangered the sustenance of our economies. There has been persistent and rapid exploitation of natural resources to achieve economic growth leading to unsustainable world economic growth. Thus, there is an urgent need for adoption of sustainable practices both in consumption and production to try to obtain preservation and balance on economic, environmental and social dimensions. The need of reduction of environmental impact by economical activities is already accepted by governments and society all over the world. The focus has therefore, shifted from making the enterprises greener to addressing the issue of sustainability in businesses right from their inception. UNFCC has also come up with standards for measuring the carbon footprints of the industries for not only in-house gas emission but also for the entire value chain . Lead policy makers and institutions have enacted laws that prevent enterprises to harm the environment and incentivize firms that are engaged in green innovation, use of green technology and production of green products. Further growing awareness among consumers about environmental preservation has created green markets that demand products produced using green technologies, redesigning of supply chain in tandem with green agenda, creating new opportunities for green entrepreneurship.

Entrepreneurship is considered to be the moving force of the economy, assuring economic growth, technological and organizational innovations, and new workplaces. There are many definition of Entrepreneurship and one of them describes entrepreneurship as "Creative destruction", which is a continuous process of product and process innovations, leading to replacement of old products by new ones. Entrepreneurship has been emphasized as the vehicle of economic growth and development, as it creates value by generating employment opportunities, removing regional economic and social disparities, promoting gender equality , more even development of infrastructure and import substitution. However in the face of environmental dangers economies are facing, economic development being replaced by sustainable economic development and entrepreneurs as the change agents, can be the torch bearers of sustainability.

The term Green entrepreneurship is defined as an economic activity whose products, services, methods of production or organization have positive effect on the environment .It is a combination of the main characteristics of the entrepreneurship itself –innovation, risk, a brand new business idea, and the ecological and social engagement of those who do business. Therefore, being "green" is associated with being "social" for ecological issues which are, too, social ones. Green entrepreneurship is actually sustainable entrepreneurship and is an intersection of traditional, social and sustainable entrepreneurship.

India like other countries has been rapidly utilizing natural resources for achieving rapid industrialization and economic growth. Therefore, we need green entrepreneurs who can act as change agents and can help achieving economic growth in a sustainable manner by marrying the twin processes of innovation and sustainability. The purpose should be to provide such an enabling environment that these green entrepreneurs not only get successful but also lead other businesses towards adopting green practices.



Today when every country is focusing on 'sustainable development', the Indian markets are also responding to the phenomenon of climate change, as there is a paradigm shift towards green production and consumption in the recent decades. Consumers' tastes and preferences are shifting towards sustainable products. Increase in per capita Income, improvement In level of education, changes in lifestyle and growing awareness about environmental concerns may be the causes of this shift. The paradigm shift in the consumption patterns have led to emergence of green markets in India, that provide huge scope and opportunities for entrepreneurs to design, develop green products and making use of green processes.

However, to promote green entrepreneurship there is a need to define green entrepreneurship, provide friendly policy frameworks, educate consumers about the importance of consuming green products which in turn will lead to people buying green products. There is a need to incentivize investments in green business practices and reducing bottlenecks in the development of sustainable market scenario in India We need to facilitate green entrepreneurs in raising of funds, provide access to information, create legal awareness and support for managerial and technical expertise We need to create a more friendly economic ecosystem to reduce failure as well as connect with people who are deeply involved in resolving environmental issues.

Skill Council for Green Jobs created in Oct 2015 provides support for skilled workforce requirement of the Green Business Industry which covers the entire gamut of Renewable Energy, Energy Storage, Green Construction, Green Transportation, Carbon Sinks, Solid Waste Management, Water Management & e-Waste Management It is managed by an industry led Governing Council to meet skill requirements for Green Businesses and acts as a bridge between the Government, Industry and various key stakeholders for developing strategy & implementing programmes for Skills Development, correlated to Industry needs and also aligned to international best practices.. SCGJ has established strategic alliances with about 400 Industries, and is also focusing on "Entrepreneurship development for Sustainable Development" to generate revenue for long term sustainability. SCGJ also aims to support women in India to learn marketable skills and connect with income opportunities. . In order to facilitate promotion of green practices in business and industry SCGJ has developed National Occupational Standards for energy and water conservation waste management and resource efficiency in all the training modules.

In a very short span, SCGJ has affiliated over 500 training institutions across 24 States, PAN India and delivered over 5,00,000+ candidate trainings on the QPs developed by SCGJ. SCGJ has trained over 2000 Trainers and certified more than 200 Assessors. Of these about 1 Lakh have been trained on renewable energy which includes 80,000 of trainees on PV Installer(Suryamitra). About 3 lakhs Safai Karamcharis and 2500 waste pickers of Municipal Corporations in 18 States were trained for mechanized cleaning, segregation, collection and composting of waste. As part of a project of SafaiMitra Suraksha Challenge' launched by Ministry of Housing and Urban Affairs (MoHUA), SCGJ trained 3112 Desludging Workers. A total of 793 candidates were trained as Wastewater Treatment Plant Technician including 118 numbers from 8 Common Effluent Treatment Plants (CETPs) in Delhi on operation and maintenance and issues related to environmental compliance.

SCGJ is developing an Entrepreneurship program around all its major qualifications including solar energy, solar power projects, solar water pumping, waste management etc. Under Solar Entrepreneurship project of Climate Policy Initiatives, SCGJ have trained 40 Solar Entrepreneurs for promoting Solar power project and water pumping. SCGJ had ventured into online courses delivering trainings in multiple languages to 1074 trainees including Bankers, Solar Entrepreneurs and other across 72 member counties of International Solar Alliance. To promote sustainability and ensure an environment and resource conservations are fully mainstream, SCGJ has prepared training modules for Greening of Job roles across all the sectors. SCGJ is making its all endeavors to promote skill development in green jobs for promoting green entrepreneurship in environmentally friendly green technologies.



Skill Development for Climate Resilience

Dr. Manoranjan Hota

Advisor Skill Council for Green Jobs



Humanity has increased its pressure on the environment. Climate is changing, and human activity is the primary factor in the acceleration of climate change over the past century. The consequences of climate change are now being experienced which include droughts, water scarcity, forest fires, rising sea levels, flooding, melting polar ice, declining biodiversity etc. The ability to prepare ourselves, to be climate resilient by recovering from and to adapt to these imminent future impacts and are among the greatest challenges of our times

The signatory of the 2015 Paris Agreement on climate change recognized the need for urgent action. But a commitment to environmental sustainability by itself seems not enough. Addressing these risks not only protect the environment, people and property, but can also regenerate economic activity that will create jobs and drive prosperity. GHG emissions and the resulting climate change, natural resource scarcity, air and water pollution, soil degradation, biodiversity loss, changes in biogeochemical cycle directly and negatively affects the world of work. Economic activity and jobs rely on environmental resources, and its ecosystem services.

The risks and hazards associated with environmental degradation tend to effect on the world of work directly and indirectly mostly for the least economic strata of the society mostly to women and vulnerable workers. While, climate change and environmental degradation reduce productivity and destroy jobs and has rippling effects on the most vulnerable, whereas the transition to a green economy has the potential to, if managed appropriately, can create millions of sustainable green jobs. Global and local environmental degradation threaten jobs and worsen working conditions, especially in developing countries and among women and most vulnerable people such as migrant workers, economically poor people. Therefore, skilling, reskilling and upskilling covers not just technical skills, but core/soft skills which can offer a comparative advantage because they can easily be transferred across occupations. Skills development programmes are crucial to the achievement of such transition for climate resilience. The transition to environmentally sustainable and inclusive economies and societies cannot take place if the skills demanded by new jobs are not available in the labour market. The transition is therefore conditional on investment in training to develop skills to meet new requirements and avoid skills mismatches. Futuristic skills strategies are necessary to train young people and reskill the current workforce to meet the skills needs of the new jobs generated in the transition process in expanding sectors.

Jobs in industries, tourism, fisheries, forestry depends on a healthy environment. Rise in temperature due to climate change will increase the number of days that are too hot to work, putting workers' health at risk and reducing productivity. Social protection systems are the first line of protection against the negative effects on income of different risks, including those stemming from climate change and local environmental degradation. They support the economy by stabilizing household incomes.



It has been seen that renewable energy has been a particularly important source of green jobs across a wide range of countries as globally seen due to the strong focus placed on this sector in Nationally Determined Commitment (NDC) under the Paris Agreement. There is also a greater need to focus on environmental goods and services sector, which includes waste, energy and water management. Green skills needed to adapt products, services and processes to climate change and the related environmental requirements and regulations. They will be needed by all sectors and at all levels in the workforce.

Transitioning to a net-zero world is one of the greatest challenges humankinds is facing and calls for a complete transformation of how we produce and who are the work force behind these activities. The successful transition to a low-carbon economy and to Net Zero will only be possible if labour force is able to transfer from areas of decreasing employment to other industries is ensured, and if adequate human capital exists to develop new industries that will grow as a result of climate change mitigation and adaptation activities for a climate resilient future. Skills development activities will play a major role in each of these transitions. People without adequate skills have a greater chance of experiencing economic disadvantage due climate change leading to higher likelihood of unemployment.

It is s not easy to predict how many jobs will be created and/or destroyed by the impact of climate change and towards climate resilience. But it is certain that the on-going process of transformation towards green economy will lead to significant changes in formal and informal labour demand both between and within various service and economic sectors.



Green Business in India

Mrs. Sonia Parashar

Deputy Manager Skill Council for Green Jobs (SCGJ)



The concept "green business" is composed of two elements - "green" and "business". As all business, green business is about making money. But "green" means doing so while sustainably harnessing opportunities that nature holds, and without harming the environment. Green business can be defined from two perspectives: one relates to the output in the form of green products or services, while the other relates to the process of an economic activity. This means entrepreneurs can enter into the "green" business sector by either providing environmentally friendly products or services or through an environmentally friendly process or with the help of clean technologies which reduce any negative effects of the business.

Why Go Green?

There is no doubt that green business is critically important for productive, healthy and sustainable societies. As green businesses use limited amounts of (or no) fossil fuels and have low (or no) emissions, they can play a key role in combating climate change while contributing to growth and the creation of decent and green jobs.

Some examples of benefits of a green business:

- Access to markets: As clients increasingly demand environmentally friendly products because of increased eco-awareness, but also because of health reasons (greater safety of non-toxic products) or financial reasons (lower operating cost).
- **Cost savings:** As water, energy and other bills go down and as resource-use becomes more efficient.
- Access to support: Both financial and non-financial, as governments place increasingly high importance on environmental considerations.
- **Higher productivity:** Due to a healthier workforce whose ability to work is not compromised by health hazards such as toxins in the workplace.

• A healthier surrounding environment in which the resources needed by the business now and in the future are preserved. (https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---ifp_seed/documents/publication/wcms_555274.pdf)

India is a country that heavily relies upon various forms of polluting hydrocarbons for energy to run its industries, power plants and vehicles. With the increasing industrialization and population, it is challenging to even fathom the consequences of depletion of non-renewable energy sources. However, in light of the growing concern of climate change, India is on an upward trajectory to ensure the adoption of other eco-friendly alternatives for energy. In this regard, electronic vehicles ("EVs") are currently being perceived as a lucrative alternative to the customary petrol/ diesel vehicles.



India's e-mobility initiatives for pollution-free commercial and private transportation have prompted many established vehicle manufacturers and new entrants to begin manufacturing of EVs in the last mile connectivity and bulk short/long distance transportation.

There is now a massive number of EV start-ups in India but it is the mainstream players consumers have their eyes set on. TVS Motor Company and Bajaj Auto have already launched their electric scooters. Besides these, start-ups like Ather Energy have grown to level where they enjoy customer trust and following. In electric passenger vehicle sales, Tata Motors is currently leading with the likes of the Nexon EV, Mahindra unveiled new electric SUVs.

On the other hand, Ola Electric has made strong sustainability commitments. Its electric scooters are an alternative to petrol and diesel-based two-wheelers. They help reduce pollution and address concerns over climate change.

Government Push

The Government of India has taken several initiatives in order to promote the adoption of EVs as a viable alternative. a brief overview of such initiatives proposed by the Government.

Automotive Mission Plan 2006-16 ("AMP-I")

In January 2007, the AMP-I was launched in India with the vision of making India emerge as the prime destination in the globe for designing and manufacturing automobiles and auto components and providing additional employment to people

National Mission on Electric Mobility

In the year 2011, the National Mission on Electric Mobility was announced. In terms of the mission, an ambitious target was set to completely cease the sale of petrol/diesel run vehicles by 2030 in India and solely have EVs to replace such vehicles. To initiate the roadmap to achieve this target, the Union Cabinet approved the setting up of a National Council for Electric Mobility ("NCEM"), to act as the apex body in the Government for making any recommendations in such matters. The National Board for Electric Mobility ("NBEM") was also set up to assist the NCEM at a secretary level, by the Department of Heavy Industry ("DHI")

The Faster Adoption and Manufacturing of Hybrid and Electric Vehicle (FAME)

Provides incentives for the purchase of EV's. The phase II of the scheme that began in 2019 offers incentives ranging from Rs 1800 to Rs 29,000 on electric two- wheelers, and up-to Rs 1.38 lakh on cars.

Automotive Mission Plan 2016-26 ("AMP-II") 13

AMP-II aims to make the Indian automotive industry a significant contributor to the "Skill India" program and make it one of the largest employments creating engines of the country. Under the AMP-II it has been decided that adequate incentives will be given for speedy development of an indigenous component design and manufacturing base for the electric and hybrid vehicle industry to take off in India.

Production Linked Incentive ("PLI") schemes

To further the objective of attracting investments in the manufacturing sector and to create large scale manufacturing ecosystem in the country, the Government has launched PLI schemes as part of Make in India. The PLI schemes provide incentives either in form of cash incentive (disbursed through direct bank transfer) or by way of any other adjustment mechanism to the selected investors.

India launched the e-AMRIT portal at the COP26 Summit in Glasgow. The portal aims to function as a one-stop destination for all information on EV's, like charging facility location and EV financing options as well as information about investment opportunities, government policies, and available subsidies. Similarly, there will also be an EV Super App that will serve as a singular mobile phone solution for all details on charging and tariffs, etc.

EV Industry holds immense potential that will benefit large pool of stakeholders.



Glimpse of Green Entrepreneur in India

Mr. Ankur Sood

Associate Manager - Strategy & Operations Skill Council for Green Jobs



A green entrepreneur is concerned about environmental preservation and renovation. Green entrepreneurship refers to a special subset of entrepreneurship that aims at creating and implementing solutions to environmental problems and to promote social change so that the environment is not harmed. For example, a printing company may use recycled paper and solar energy to reduce any negative environmental impacts. Businesses like these can set an intentional standard of sustainability that serves as a key marketing tool when advertising to the majority of consumers who are looking to support sustainability.

Green entrepreneurs are problem solvers and are very resourceful. They are proactive and demonstrate considerable initiative and don't generally accept or believe in limitations. They tend to be the ones who find a way when everyone else thinks they have reached a dead end. There is no doubt that the main benefit of going green is that it will reduce its impact on the planet. Especially young entrepreneurs who pay more attention to the way their business affects the environment. Therefore, the business reputation will increase significantly which can mean a significant increase in sales.

Company Name	Products	Samples
Poseidon Solar Services Pvt. Ltd., Chennai	Exclusive silicon wafer and solar cell recycling facility recovers all types of silicon and cell raw material bringing disposed and dead material back to the value chain in a professional recycling way.	
EcoRight	It makes products that are ethically, socially, legally, and environmentally audited as per the pillar standards of SEDEX 4, some of Ecoright products are Tote bags, Work bags, Backpacks.	is the transfer of the transfe

Following are some of the startups in India by Green Entrepreneurs whose products are environmentally sustainable.

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Company Name	Products	Samples
Chal and Chuckles	The toys are handcrafted MDF (Class I), and are printed using soy-based ink and none of them run on batteries or chargers.	
Love Organically	Every product includes nutrients from flower extracts, essentials oils, and aromatic botanicals.	
MINC	Designs garments while only using natural fabrics, azo-free environment-friendly dyes, and closure made from natural materials like wood, coconut, etc. It also promotes khadi, and the team believes in promoting green living through eco-fashion.	



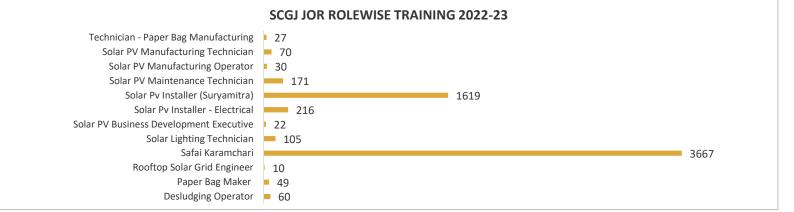
SCGJ Through Data Q1 & Q2 2022 - 2023

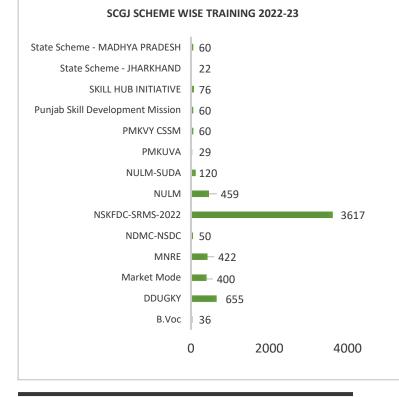
Mr. Kamal Saxena

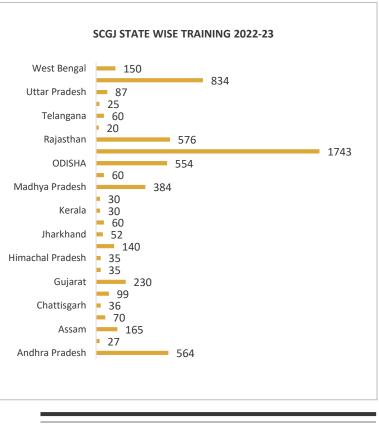
Manager - Operation & Strategy Skill Council for Green Jobs

TOTAL TRAINING = 6046

CUMMULATIVE TRAINING = 524226









WorldSkills Competition 2022 Special Edition

Mr. Ankur Sood

Associate Manager - Strategy & Operations Skill Council for Green Jobs





SCGJ Congratulates Mr. Praveen Kumar Giri

Silver Medal, Water Technology

World Skill Competition 2022 Special Edition Skill India Skill India Skill India

Another big one!! Yes! It's a SILVER Medal for **#TeamIndia WorldSkills** Competition 2022, Stuttgart, Germany in Water Technology!! Praveen Kumar Giri brings laurel to India with his big win. The next techade is certainly ours! **#VijayiBhava #SkillSeShikharTak #BringONSkills**





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70 Retweets 3 Quote Tweets 136 Likes



Azadi ka Amrit Mahotsav

Celebration of 75 years of India's Independence

Mr. P. B. Singh

Deputy Manager - Strategy & Operations Skill Council for Green Jobs

SCGJ is continuing to bring eminent Speakers in diverse field/sectors so to enhance knowledge and learning and bring forth various development and innovation in Renewable Energy(RE) and waste management as a part of the 'Azadi ka Amrit Mahotsav'. By September 2022, SCGJ conducted 43 webinars on different topics.





SCGJ Azadi Ka Amrit Mohotsav Website https://scgj.azadikaamritmahotsav.in/



Access Recorded Webinars https://www.youtube.com/playlist?list=PLofZcNZJ8 Dg7dSH0J3hDUcUb UPmnrrmE





Events & News

Skill Council for Green Jobs





On the commemoration of the "International Day of Clean Air for Blue Skies" on 7th September, 2022, "Jobs for Clean Air Report" has been released. In this joint report SCGJ has been a major contributor along with iFOREST, World Bank Group, Pollution Management & Environment Health, National Knowledge Network, Air Quality Action Forum and NRDC.



A fruitful meeting was held with Ms. Devanjana Choudhuri, Country Director, India, Power For All, and Ms. Aashna Aggarwal, Manager, Power For All in SCGJ office.

Invitation to the Virtual Launch of Urjamitra Solar Training mit "Preparing Skilled force for a Just Energy Transition"



Invitation to the Virtual Launch of Urjamitra Solar training "Preparing Skilled force for a Just Energy Transition".



A visit to Skill Council for Green Jobs (SCGJ) by the government officials of Togolese Republic (Togo) to collaborate at various levels.

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SCGJ participated on 'Powering Jobs Census 2022': Focus on India organized by Power for All.



Skill Council for Green Jobs organized "Online workshop to create awareness on Carbon Neutrality in Defence organization" on Thursday, the 22nd of September, 2022.



SCGJ organized Convocation ceremony on Vishwakarma Day to honor and certify outstanding skilled personnel in Solar Energy and Waste Management. The certificates were given by Mr. Arpit Sharma, COO, SCGJ.



Skill Council for Green Jobs (SCGJ) had conducted online training on Solar Energy for officers of CE R&D of MES from 22nd August to 26th August 2022.



EDITOR OF THIS ISSUE

Sarvesh Pratap Mall Senior Manager - Technical, SCGJ sarvesh@sscgj.in

